

Contd *sub D3*

susceptor material heat sufficiently to cause a shrinkage of said susceptor carrying portions of the film thereby effecting preferential shrinkage in a predetermined manner.

Remarks

This amendment has been filed in response to the Final rejection issued August 4, 1998. Applicants request that the Finality of the Office Action be withdrawn and the above amendment entered in view of the arguments presented below.

Applicants submit that claims 36-42, along with newly added claims 43-46 are currently under examination as these claims are directed to the elected invention of Group II. This invention was elected, without traverse, in response to a restriction requirement under 35 USC § 121 (Office Action of May 11, 1998).

Request for Withdrawal of the Finality of the Rejection

Applicants respectfully request withdrawal of the Final rejection which was made Final in a First Action on the Merits in the Office Action of August 4, 1998. The Final rejection is believed to be improper under MPEP § 706.07(b) which recites:

"...it would not be proper to make final a first Office action in a continuing or substitute application where that application contains material which was presented in the earlier application after final rejection or closing of prosecution but was denied entry for one of the following reasons:

(1) New issues were raised that required further consideration and/or search..."

Applicants submit that an after final amendment to claim 38 in the parent application was denied entry based on "raising new issues that would require further consideration and/or search" (see Advisory Action of parent application serial no. 08/638,160, paper no. 9). Upon refiling as a continuation application the amended claim 38 was introduced into the continuation application by preliminary amendment. As such, it is considered improper for the Examiner to make a first action final in the present

application wherein the claims of the present application were denied entry in the parent application as raising new issues. (See MPEP 706.07(b))

In light of the above, Applicants respectfully request withdrawal of the Finality of the rejection and entry of the amendment included herewith.

Rejection of Record

Claim 37 stands objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form.

Claims 36-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heilman et al. (Australia 27,337) in view of Anderson et al. (US 5,113,479).

Claims 36-42 stand provisionally rejected under the judicially created doctrine of obviousness type double patenting over copending application no. 08/699,332.

The Invention

A container cover comprising a transparent film is provided which is susceptible to shrinkage at specific locations upon exposure to radiant (IR) energy. The specific locations are formed via incorporation of a susceptor material. The susceptor material is sufficiently opaque to prevent pass through of the IR energy, thereby converting the IR energy to heat energy which causes preferential shrinking of the packaging material at that particular location. Transparent sections do not shrink.

The claims of the present invention require a transparent film to be used as covers for open topped containers wherein the film is normally not susceptible to shrinkage upon exposure to IR energy. The film is rendered susceptible to shrinkage at particular locations by imparting an opaque substrate material at those locations where shrinkage is desired. In the present invention a downwardly extending portion of the cover sized material is imparted with the substrate to render the downwardly extending material opaque and thus susceptible to shrinkage.

Objection Under 37 C.F.R. 1.75(c)

Claim 37 was objected to under 37 C.F.R. § 1.75(c) for failing to further limit the subject matter of a previous claim. The Examiner has indicated that in claim 37 the recitation that the first means absorb radiation is found in claim 36, from which claim 37 depends.

In response to the above objection, Applicants have amended claim 37 to recite that the first means absorbs radiation by imparting opacity to said first means. Support for this is found at page 13, lines 2-5.

In view of the amendment to claim 37, Applicants respectfully request withdrawal of the objection under 37 C.F.R. § 1.75(c).

Rejection Under 35 U.S.C. § 103

The Examiner has rejected claims 36-42 under 35 U.S.C. § 103(a) as being unpatentable over Heilman et al. (AU 27,337) in view of Anderson (US 5,113,479). The Examiner's reasoning in the Office Action of August 4, 1998, provided at page 3, is as follows:

"Heilman et al. teach a film which extends over the rim of a container and is heat shrunk onto the container by applying energy which may be in the form of infrared radiation to the edge first while the top is shielded, then to the top as an option to further tighten the film (page 10). Anderson et al. teach the use of coloring on a edge to better absorb infrared radiation to raise the temperature to heat seal the edge of the film. The instant invention claims a printed area on the edge rim of a film lid to better absorb radiation in order to heat shrink the film. It would have been obvious to one of ordinary skill in the art to color the edge of the film of Heilman in order to be better able to apply infrared energy in a selective manner to the rim as opposed to the top of the lid because of the teachings

of Anderson et al. to enhance infrared energy absorption in a limited area by the use of coloration."

The Applicant has carefully considered the references, and the Examiner's comments noted above, and respectfully requests the Examiner to reconsider.

Heilman is directed to a device which is similar to the Applicants' in that it teaches the use of the heat shrink film to form lids on open topped containers. However, the disclosure of Heilman is quite different from the applicant's claimed invention with respect to the film. In fact, it is submitted that a careful examination reveals that Heilman teaches directly away from the applicant's invention as now claimed.

At page 2, Heilman teaches that "when a piece of heat shrinkable oriented plastic film is subjected to heat of any type, it will shrink and shrivel into an irregular ball-shaped configuration due to its inherent oriented characteristics. However, when the central or interior portion of the film is shielded or otherwise insulated from the direct or indirect influence of heat while the perimeter or rim area is subjected to heat, only the rim area will shrink and will be reduced.." (emphasis added)

At page 3 Heilman teaches that the invention is to provide a method using a transparent (preferably) heat shrinkable oriented plastic film or sheet. At pages 9 and 10, Heilman teaches leaving the exposed edges of the film exposed to blasts of hot air or steam, or to heat caused by high frequency electricity, electrical resistance, infrared or other heat, supplied to the ring or directly to the film in conventional manner. Later on page 10, the reference teaches that "Obviously, an oven heated by infrared heat lamps or any other heat would be within the spirit of my invention. The sole consideration is that a shield tightly pressed against the container rim must be provided before the film-covered container enters the heated area so that the skirt of the film will be selectively shrunk first to provide a tight but elastic and flexible edge bead around the container and removably retain the cover on the container. If

the shield is not pressed tightly against the container rim, to thereby shield and restrain the entire area within the mouth of the container when the film edges are being heated, no seal will result."

The Examiner has argued that Heilman teaches application of infrared radiation directly to the edge of the film which extends over the edge of a container to cause shrinkage of the film. This is simply not the case. As was set forth in the previous response, and even according to the cited text referred to by the Examiner (p. 10 of Heilman), infrared radiation is used to cause heat which shrinks the film. However, a transparent film, alone, will not generate heat when exposed to infrared radiation. Some absorptive material is needed to cause the infrared energy to be transformed into heat energy. Thus, in Heilman, an oven type device supplied with infrared energy converts the infrared energy to heat energy which heat, ultimately, causes a heated surface of transparent shrink wrap film to shrink. In fact, Heilman teaches blocking or covering areas of the film where shrinkage is not desired as the heat, not the IR energy, will shrink all exposed areas of the film. By itself, infrared radiation will not have any effect on transparent shrink wrap film of the cited reference. Because Heilman fails to suggest imparting some opacity to a transparent film, there is simply no mechanism by which radiant energy, alone, would cause film shrinkage.

In summary, although Heilman suggests use of infrared radiation, he only teaches radiation in association with an oven. Thus, he teaches using this as a heat source for heating air, not the film. This is confirmed by the teaching that transparent film is preferred. Transparent film will not heat under infrared radiation since the radiation will pass unimpeded through the film. That Heilman means to only the heat air is also confirmed, because Heilman teaches that a top shield is essential. A top shield is only essential with a diffuse heat source, such as hot air. There is simply no teaching in this reference of using an infrared radiation source as a way of transmitting energy directly to the film. In fact, this reference teaches away from

using the energy source in this way, with its reference to "hot blasts", transparent film and the necessity of a top shield.

The Examiner, recognizing some deficiency in the Heilman reference with respect to the select opaque surfaces of the presently claimed invention, has cited Anderson et al. for teaching use of a colored material on the edge of a thermoplastic film to better absorb infrared radiation along the edge in a heat sealing process. However, Anderson differs from the invention (and from Heilman) in a materially significant way. Anderson is concerned with applying infrared radiation to a specific location on an entirely opaque material (a package). The infrared radiation is directed to particular spots via reflectors to avoid heating (and subsequent melting) of the entire surface of the thermoplastic material used as a laminate coating on the packaging material. Various portions of the thermoplastic laminate may be preprinted with a colored strip to enable less infrared radiation to be used when heating the material.

Thus, a critical difference in Anderson is that Anderson does not concern transparent shrink wrap technology at all. Anderson is concerned with melting (as opposed to shrinking) a thermoplastic laminate on a packaging material at specified locations to enable welding of the packaging material. The colored markings are optional in Anderson as the entire laminated material is opaque and thus able to generate heat when supplied with radiant energy. None of the problems associated with shrink wrap technology are addressed by Anderson as Anderson is concerned with an entirely different problem. Anderson limits the exposure area of the infrared radiation which converts radiant energy to heat. Applicants have done exactly the opposite. Applicants have increased the area of a transparent shrink wrap film which converts radiant energy to heat energy. This is clearly not taught nor suggested by Anderson, either alone or in combination with Heilman.

As such, the Examiner has provided no motivation to combine the teachings of the cited art. When considering the teaching of a particular reference, it is the teaching of the reference, as a whole, which must be considered. It is not proper for the

Examiner to "pick and choose" selected portions of the cited art and, with the benefit of the Applicants' disclosure, render the invention obvious. The teachings must be viewed in their entirety, including any teaching away from the invention. In the present case, the Examiner has simply ignored the overall teaching of the references and merely combined the unrelated art using the present disclosure as a motivation to do so.

Even assuming, for arguments sake, that the Examiner's combination is proper, it is respectfully submitted that Applicant's invention is not a mere obvious combination of the teachings of Heilman and Anderson. In the Applicant's respectful submission, a person of ordinary skill in the art would not be motivated to combine Heilman and Anderson, because, the teachings of Anderson are redundant to Heilman. Heilman teaches that it is essential for controlling the top shrink of a shrinkable film. In light of this, the teachings of Anderson, even if applicable (which is not admitted since Anderson teaches heat welding plastic and has nothing to do with heat shrinking), are redundant to Heilman. Why would a person of ordinary skill in the art combine the heat concentrating strip of Anderson to overcome a problem already clearly overcome by Heilman by using a top shield? There is simply no motivation provided in the art for a person skilled in the art to make the Examiner's combination. The problem addressed by Anderson is already adequately solved by Heilman. It is only with the benefit of Applicant's disclosure that the Examiner has made the combination, having already understood and recognized the benefits of the Applicant's idea. In the Applicant's respectful submission, the standard to be applied is not could the references be combined in the way the Examiner has, but would they have been so combined by a person of ordinary skill in the art using motivation provided by the art? A person of ordinary skill in the art would recognize that Heilman teaches a complete solution for shrinking the downwardly extending film, by shielding the top. In this context, such a person would not need the concentrating advantages taught by Anderson. Thus, there is simply no basis for holding that a

person would make the combination, absent the Applicant's own disclosure.

The Applicant was the first to realize the benefits of adapting a heat shrinkable film to absorb directly radiant energy such as infrared energy, instead of using the same indirectly to heat the air, which then impinges on the film.

In view of the foregoing, the Applicant submits that the invention as presently claimed is not obvious in light of either Heilman or Anderson, whether taking singly or in combination as the Examiner has suggested. As a matter of interest, the Applicant notes that claims of the same scope were found to include both the required novelty and inventive step under CH II Preliminary Examination under the PCT.

Provisional Obviousness Type Double Patenting Rejection

Claims 36-42 have been provisionally rejected under the judicially created doctrine of obviousness type double patenting over claims 1, 2, 15, 16 and 19 of copending Application No. 08/699,332.

Upon indication of allowable subject matter, Applicants will file a Terminal Disclaimer, if appropriate, in order to address the obvious double patenting issue.

Conclusion

Based on the arguments present above, Applicants respectfully request the entry of the amendment to the claims, withdrawal of the Final rejection and notification of allowability of all of the claims. Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned

in an attempt to resolve any such issues.

Respectfully submitted,

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